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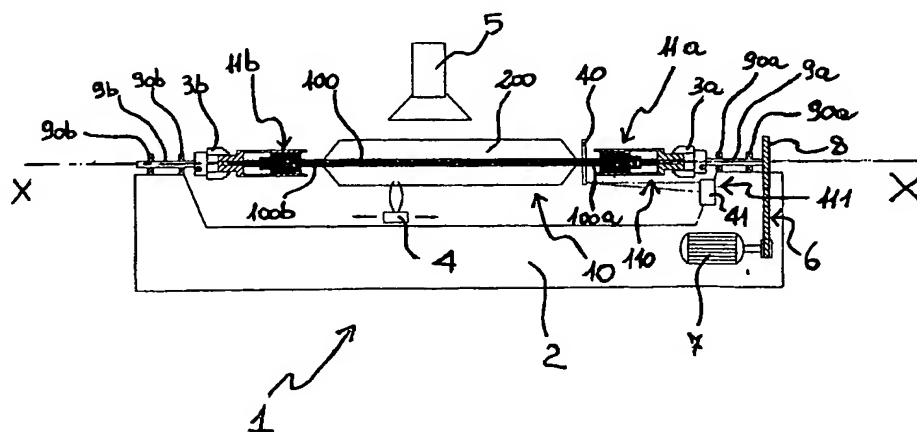
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(54) Title: APPARATUS AND METHOD FOR MEASURING THE WEIGHT OF AN OPTICAL FIBER PREFORM DURING A CHEMICAL DEPOSITION PROCESS FOR FORMING THE PREFORM



(57) Abstract: An apparatus (10) for measuring the weight of a preform for optical fibres during a chemical deposition process for the formation of a preform is herein described. The apparatus comprises at least one elastic constraint (11a, 11b) associated with at least one end portion (100a, 100b) of an elongated element (100) constituting a chemical deposition substrate for the formation of the preform, a device (110) for inducing an oscillation, for example axial, on said elongated element (100), a device (111) for detecting the frequency of oscillation of said elongated element (100) and a device (112) for calculating the weight of the preform according to the detected frequency of oscillation. Advantageously, the device of the invention allows the realisation of a method for measuring the weight of the preform wherein the errors in measurement caused by thermal drift effects, by the axial distribution of the masses on the preform and by loads which are different to the mass of the preform in formation are reduced to below the required precision in measurement.

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